

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Catlettsburg Refining, LLC
Mailing Address: PO Box 1492
Catlettsburg, Kentucky 41129

Source Name: Same as above
Mailing Address: Same as above

Source Location: Immediately south of the I-64 & U.S. 23 intersection and
west of the Big Sandy River

Permit Number: VF-04-001
Log Number: 56367
Review Type: Synthetic Minor, Construction / Operating
Source ID #: 21-019-00004
AI#: 339

Regional Office Ashland
County: Boyd

Application
Complete Date: October 19, 2004
Issuance Date:
Expiration Date:

**John S. Lyons, Director
Division for Air Quality**

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EMISSION UNIT NUMBER	EMISSION UNIT NAME
2-122	Kerosene Desulfurization (KDS) Unit

DESCRIPTION

The KDS Unit (No. 2-122) is a proposed new process unit. This unit will have a nominal capacity of 25,000 barrels per day and will utilize a fixed-bed hydrotreating process to process blended kerosene down to a maximum product sulfur content of 10 parts per million (ppm). The only emissions from the KDS Unit will be fugitive VOC emissions due to equipment leaks.

APPLICABLE REGULATIONS FOR KDS UNIT

401 KAR 63:002 – (40 CFR 63 Subpart CC) National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

401 KAR 60:005 – (40 CFR 60 Subpart QQQ) Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater systems

401 KAR 59:046 – Selected new petroleum refining processes and equipment

401 KAR 61:135 – Selected existing petroleum refinery processes and equipment

1. Operating Limitations:

- A. Pursuant to Regulation 40 CFR 63.138(k), for each residual removed from a Group 1 wastewater stream, as defined in 40 CFR 63.161, the owner or operator shall control for air emissions by complying with 40 CFR 63.133 through 63.137 and by complying with one of the provisions below:
 - i. Recycle the residual to a production process or sell the residual for the purpose of recycling. Once a residual is returned to a production process, the residual is no longer subject to this section.
 - ii. Return the residual to the treatment process.
 - iii. Treat the residual to destroy the total combined mass flow rate of Table 8 and/or Table 9 compounds by 99 percent or more, as determined by the procedures specified in 40 CFR 63.145(c) or (d).
 - iv. Comply with the requirements for RCRA treatment options specified in 40 CFR 63.138(h).
- B. This permit authorizes installation of new equipment in VOC service within the KDS Unit battery limits as follows:

Component Type	# added
light liquid valves	191
heavy liquid valves	558

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Gas/vapor valves	708
connectors	1052
light liquid pumps	2
heavy liquid pumps	4
compressors	4
pressure relief valves	39

- C. As referenced by 40 CFR 63.648(c), Equipment in the KDS Unit (No. 2-122) will be subject to the 40 CFR Part 63 Subpart H compliance option. The specific requirements of 40 CFR 63 Subpart H are listed below separately entitled “40 CFR Part 63 Subpart H LDAR Conditions.”
- D. The control devices shall be maintained and operated in accordance with the provisions of 40 CFR 63 Subpart CC.
- E. Pursuant to 40 CFR 63 Subpart CC, upset and blanket gases shall be routed to the flare system.
- F. The refinery shall maintain a list of all QQQ affected individual drain system components. The affected Individual Drain Systems shall operate according to the applicable sections of 40 CFR 60.692-2 (a)(1), (b)(1), (b)(2), and (c)(1) as follows:

[40 CFR 60.692-2]

“(a)(1) Each drain shall be equipped with water seal controls.

(b)(1) Junction boxes shall be equipped with a cover and may have an open vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(b)(2) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(c)(1) Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.”

Compliance Demonstration Method:

- i. The permittee shall keep records at site indicating the compliance option being followed and all the necessary monitoring data to show compliance with that option.
- ii. Records shall be kept of upset and blanket gases being generated and records of those gases being routed to the flare.

2. Emission Limitations:

- A. The process vents are exempt from any of the emission standards of 40 CFR 63 Subpart CC because they are vented to one of the control options under this subpart.
- B. For purposes of 40 CFR 63 Subpart CC, a list shall be maintained of all affected process vents, as defined in 40 CFR 63.641, and their associated control devices.
- C. During any turnaround all gaseous hydrocarbons purged from a process unit or vessel shall be vented to a firebox, flare, or other control device of equivalent efficiency as determined by the Division until the pressure in the process unit or vessel is less than five (5) psig in accordance with the requirements of 401 KAR 59:046 Section 3 (2) or

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61:135 Section 3 (2).

- D. The permittee shall comply with the requirements of 401 KAR 59:046 Section 3 (2) or 61:135 Section 3 (2) for process unit turnarounds.
- E. The permittee shall control emissions from vacuum producing systems in accordance with the requirements of Regulation 401 KAR 61:135 Section 3 (1), Vacuum Producing Systems as follows:

[401 KAR 61:135 Section 3(1)]

“...(1) Vacuum producing systems. All gaseous hydrocarbons emitted from condensers, hot wells, vacuum pumps, and accumulators shall be collected and vented to a firebox, flare or other control device of equivalent efficiency as determined by the Cabinet.”

Compliance Demonstration Method:

- i. The permittee shall keep records at the site indicating when turnarounds occurred, and records that all gaseous hydrocarbons purged from a process unit or vessel were vented to a firebox, flare, or other control device as required above.
- ii. The permittee shall keep records at the site indicating that requirements in E. above are being followed.

3. Testing Requirements:

- A. The applicable provisions listed in 40 CFR 63.645, Test Methods and Procedures for miscellaneous process vents shall be followed.
- B. The applicable provisions listed in 40 CFR 60.696, Performance test methods and procedures and compliance provisions shall be followed.

4. Specific Monitoring Requirements:

- A. The permittee shall monitor the affected individual drain systems according to the requirements of 40 CFR 60.692-2 (a)(2), (b)(3), and (c)(2) as follows:

[40 CFR 60.692]

“...(a)(2) Each drain in active service shall be checked by visual or physical inspection initially and monthly thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

(b)(3) Junction boxes shall be visually inspected initially and semiannually thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(c)(2) The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.”

5. Specific Recordkeeping Requirements:

- A. The affected individual drain systems shall comply with the recordkeeping requirements of 40 CFR 60.697(a), (b)(1), and (b)(2) as follows:

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

[40 CFR 60.697]

“...(a) Each owner or operator of a facility subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section. All records shall be retained for a period of 2 years after being recorded unless otherwise noted.

- (b)(1) For individual drain systems subject to Sec. 60.692-2, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.
- (2) For junction boxes subject to Sec. 60.692-2, the location, date, and corrective action shall be recorded for inspections required by Sec. 60.692-2(b) when a broken seal, gap, or other problem is identified that could result in VOC emissions.”

6. Specific Reporting Requirements:

- A. The permittee shall submit notification of the added equipment in VOC service in the KDS Unit. This notification shall indicate the actual number of components added for each component type.
- B. This notification of the changes to the equipment in VOC service in the KDS Unit shall be submitted within 90 days after the date of startup.
- C. The permittee shall comply with the general reporting requirements as required by 40 CFR 60.698 (b)(1), (c), and (d) as follows:

[40 CFR 60.698]

“...(b)(1) Each owner or operator of a facility subject to this subpart shall submit to the Administrator within 60 days after initial startup a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests of process drains, sewer lines, junction boxes, oil-water separators, and closed vent systems and control devices have been carried out in accordance with these standards. Thereafter, the owner or operator shall submit to the Administrator semiannually a certification that all of the required inspections have been carried out in accordance with these standards...

(c) A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted initially and semiannually thereafter to the Administrator.”

7. Specific Control Equipment Operating Conditions: n/a

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)**40 CFR PART 63, SUBPART H LDAR CONDITIONS**

All petroleum refinery valves, pumps, compressors, and sample stations associated with this process unit, and determined to be in VOC service, are presumed to be in organic hazardous air pollutant (OHAP) service and therefore subject to 40 CFR Part 63 Subpart H (40 CFR 63.648(a)(1)). For purposes of 40 CFR 63.648(a)(2), calculation of leaking components is performed on a process unit basis.

1. Operating Limitations:

- A. Pursuant to Regulation 40 CFR 63.162(c), each piece of equipment in organic hazardous air pollutant (HAP) service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, shall be identified such that it can be distinguished readily from equipment that is not subject to this subpart. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification.
- B. Pursuant to Regulation 40 CFR 63.162(f), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, when each leak is detected as specified in 40 CFR 63.163, 63.168, 63.169, 63.173 and 63.174, the following requirements apply:
 - i. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - ii. The identification on a valve may be removed after it has been monitored as specified in 40 CFR 63.168(f)(3) and 63.175(e)(7)(i)(D), and no leak has been detected during the follow-up monitoring. If the Permittee elects to comply using the provisions of 40 CFR 63.174(c)(1)(i) of this subpart, the identification on a connector may be removed after it is monitored as specified in 40 CFR 63.174(c)(1)(i) and no leak is detected during that monitoring.
 - iii. The identification which has been placed on equipment determined to have a leak, except for a valve or for a connector that is subject to the provisions of 40 CFR 63.174(c)(1)(i), may be removed after it is repaired.
- C. Pursuant to Regulations 40 CFR 63.163(c), (e)(6)(iii) and (e)(6)(iv), 40 CFR 63.168(f) and (g), 40 CFR 63.169(c) and (d), 40 CFR 63.173(c), (d)(6)(iii) and (d)(6)(iv), and 40 CFR 63.174(d) except as provided in 40 CFR 63.174(g), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, when a leak is detected:
 - i. It shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided below or in 40 CFR 63.171.
 - ii. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable:

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1. Tightening of packing gland nuts,
 2. Ensuring that the seal flush is operating at design pressure and temperature,
 3. Tightening of bonnet bolts,
 4. Replacement of bonnet bolts, and
 5. Injection of lubricant into lubricated packing.
- iii. For pumps to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected.
- iv. For valves in gas/vapor service or light liquid service, when a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.
1. The monitoring shall be conducted as specified in 40 CFR 63.180(b) and (c), as appropriate, to determine whether the valve has resumed leaking.
 2. Periodic monitoring required by 40 CFR 63.168(b) through (d) may be used to satisfy the requirements of this condition 1.C.iv, if the timing of the monitoring period coincides with the time specified in this condition 1.C.iv. Alternatively, other monitoring may be performed to satisfy the requirements of this condition 1.C.iv, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this condition 1.C.iv.
 3. If a leak is detected by monitoring that is conducted pursuant to condition 1.C.iv of this section, the Permittee shall follow the provisions below, to determine whether that valve must be counted as a leaking valve for purposes of 40 CFR 63.168(e).
 - a. If the Permittee elected to use periodic monitoring required by 40 CFR 63.168(b) through (d) to satisfy the requirements of condition 1.C.iv of this section, then the valve shall be counted as a leaking valve.
 - b. If the Permittee elected to use other monitoring, prior to the periodic monitoring required by 40 CFR 63.168 (b) through (d), to satisfy the requirements of condition 1.C.iv, then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking.
- v. For equipment identified in 40 CFR 63.169(a) that is not monitored by the method specified in 40 CFR 63.180(b), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

In accordance with 40 CFR 63.171, the following applies when a leak is detected:

- i. Delay of repair of equipment for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur by the end of the next process unit shutdown.
- ii. Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in organic HAP service.
- iii. Delay of repair for valves, connectors, and agitators is also allowed if:
 1. The Permittee determines that emissions of purged material resulting from

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

- immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and
2. When repair procedures are affected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 63.172.
- iv. Delay of repair for pumps is also allowed if:
 1. Repair requires replacing the existing seal design with a new system that the Permittee has determined under the provisions of 40 CFR 63.176(d) will provide better performance or:
 - a. A dual mechanical seal system that meets the requirements of 40 CFR 63.163(e),
 - b. A pump that meets the requirements of 40 CFR 63.163(f), or
 - c. A closed-vent system and control device that meets the requirements of 40 CFR 63.163(g); and
 2. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
 - v. Delay of repair beyond a process unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit shutdown will not be allowed unless the third process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
- D. Pursuant to Regulation 40 CFR 63.166, for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:
- i. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system. Gases displaced during filling of the sample container are not required to be collected or captured.
 - ii. Each closed-purge, closed-loop, or closed-vent system as required by this condition shall:
 1. Return the purged process fluid directly to the process line; or
 2. Collect and recycle the purged process fluid to a process; or
 3. Be designed and operated to capture and transport the purged process fluid to a control device that complies with the requirements of 40 CFR 63.172; or
 4. Collect, store, and transport the purged process fluid to a system or facility identified as follows:
 - a. A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with, the provisions of 40 CFR 63 Subpart G applicable to group 1 wastewater streams. If the purged process fluid does not contain any organic HAP listed in Table 9 of 40 CFR 63 Subpart G, the waste management unit need not be subject to, and operated in compliance with, the requirements of 40 CFR 63 Subpart G applicable to group 1 wastewater streams provided the facility has an NPDES permit or sends the wastewater to an NPDES permitted facility.
 - b. A treatment, storage, or disposal facility subject to regulation under 40 CFR

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- part 262, 264, 265, or 266; or
 - c. A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.
 - iii. In-situ sampling systems and sampling systems without purges are exempt from the requirements of this condition.
- E. Pursuant to Regulation 40 CFR 63.167, for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:
 - i. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided below.
 - ii. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.
 - iii. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
 - iv. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with this condition at all other times.
 - v. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of this condition.
 - vi. Open-ended valves or lines containing materials which would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified above, are exempt from the requirements of this condition.
- F. Pursuant to 40 CFR 63.112(e)(2), the Permittee is not required to calculate the annual emission rate specified in 40 CFR 63.112(a).
- G. Pursuant to 40 CFR 63.148(k), the closed-vent system is not subject to the provisions of 40 CFR 63.148 because it is subject to the provisions of 40 CFR 63.172.
- H. Pursuant to 40 CFR 63.162(d), equipment that is in vacuum service is excluded from the requirements of 40 CFR 63 Subpart H.
- I. Pursuant to 40 CFR 63.162(e), any pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, instrumentation system, control device or system that is intended to operate in organic hazardous air pollutant service, as defined in 40 CFR 63.161, for less than 300 hours during the calendar year is exempt from the provisions of 40 CFR Part 63.163 through 63.174 and 63.178, if it is identified as required in 40 CFR 63.181(j).

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

2. **Emission Limitations:** n/a

3. **Testing Requirements:** n/a

4. **Specific Monitoring Requirements:**

A. Pursuant to Regulation 40 CFR 63.163(b), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the Permittee shall:

- i. Monitor each pump monthly to detect leaks by the method specified in 40 CFR 63.180(b), except as provided in 40 CFR 63.163 (e) through (h) and (j). In accordance with 40 CFR 63.163(b)(2)(iii)(C), the instrument reading, as determined by the method as specified in 40 CFR 63.180(b), that defines a leak is 1,000 parts per million or greater.
- ii. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.

B. Pursuant to Regulation 40 CFR 63.163(d), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies, except as provided in 40 CFR 63.163(i):

- i. The Permittee shall calculate percent leaking pumps on a process unit basis.
- ii. If, calculated on a 6-month rolling average, the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the Permittee shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.176.
- iii. The number of pumps at a process unit shall be the sum of all the pumps in organic HAP service, except that pumps found leaking in a continuous process unit within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only.
- iv. Percent leaking pumps shall be determined by the following equation:

$$\% P(L) = ((P(L) - P(S))/(P(T) - P(S))) \times 100$$

where:

% P(L) = Percent leaking pumps

P(L) = Number of pumps found leaking as determined through monthly monitoring as required in condition 4.A of this section.

P(T) = Total pumps in organic HAP service, including those meeting the criteria in 40 CFR 63.163(e) and (f).

P(S) = Number of pumps leaking within 1 month of start-up during the current monitoring period.

C. Pursuant to Regulation 40 CFR 63.163(e), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.163(a)

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through (d), provided the following requirements are met:

- i. Each dual mechanical seal system is:
 1. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
 2. Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or
 3. Equipped with a closed-loop system that purges the barrier fluid into a process stream.
 - ii. The barrier fluid is not in light liquid service.
 - iii. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
 - iv. Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
 1. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the pump shall be monitored as specified in 40 CFR 63.180(b) to determine if there is a leak of organic HAP in the barrier fluid.
 2. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected.
 - v. Each sensor as described in paragraph 4.C.iii of this section is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site.
 - vi. The Permittee determines based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
 - vii. If indications of liquids dripping from the pump seal exceed the criteria established in paragraph 4.C.vi of this section, or if, based on the criteria established in paragraph 4.C.vi of this section, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.
- D. Pursuant to Regulation 40 CFR 63.165, for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:
- i. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with an instrument reading of less than 500 parts per million above background except as provided below, as measured by the method specified in 40 CFR 63.180(c).
 - ii. After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million above background, as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171.
 - iii. No later than 5 calendar days after the pressure release and being returned to organic HAP service, the pressure relief device shall be monitored to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR 63.180(c).

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

- iv. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in 40 CFR 63.172 is exempt from the requirements of this condition.
 - v. Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of this condition, provided the Permittee complies with the following requirement: After each pressure release, a rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 63.171.
- E. Pursuant to Regulation 40 CFR 63.168(d), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the Permittee shall monitor valves, except as provided in 40 CFR 63.168(h) and (i), as follows.
- i. In accordance with 40 CFR 63.168(b):
 - 1. The valves shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b).
 - 2. The instrument reading that defines a leak is 500 parts per million or greater.
 - ii. Monitor valves for leaks at the intervals specified below:
 - 1. At process units with 2 percent or greater leaking valves, calculated according to 40 CFR 63.168(e), the Permittee shall monitor each valve once per month.
 - 2. At process units with less than 2 percent leaking valves, the Permittee shall monitor each valve once each quarter, except as provided in E.ii.3 and 4 of this condition.
 - 3. At process units with less than 1 percent leaking valves, the Permittee may elect to monitor each valve once every 2 quarters.
 - 4. At process units with less than 0.5 percent leaking valves, the Permittee may elect to monitor each valve once every 4 quarters.
- F. Pursuant to Regulation 40 CFR 63.169(a) and (b), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:
- i. Pumps, valves, connectors, and agitators in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and instrumentation systems shall be monitored within 5 calendar days by the method specified in 40 CFR 63.180(b) if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory, or any other detection method. If such a potential leak is repaired as required in 40 CFR 63.169(c) and (d) (see 40 CFR Part 63 Subpart H LDAR condition I.1.3, above), it is not necessary to monitor the system for leaks by the method specified in 40 CFR 63.180(b).
 - ii. In accordance with 40 CFR 63.169(b), if an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million for pumps, or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

is measured, a leak is detected.

- G. Pursuant to Regulation 40 CFR 63.173(a), (b) and (d), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:
- i. Each agitator shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.180(b).
 - ii. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.
 - iii. Each agitator shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator.
 - iv. If there are indications of liquids dripping from the agitator, a leak is detected.
 - v. Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of G.i of this condition, provided the requirements specified below are met:
 1. Each dual mechanical seal system is:
 - a. Operated with the barrier fluid at a pressure that is at all times greater than the agitator stuffing box pressure; or
 - b. Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of 40 CFR 63.172; or
 - c. Equipped with a closed-loop system that purges the barrier fluid into a process stream.
 2. The barrier fluid is not in light liquid organic HAP service.
 3. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
 4. Each agitator is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal.
 - a. If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the agitator shall be monitored as specified in 40 CFR 63.180(b) to determine the presence of organic HAP in the barrier fluid.
 - b. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected.
 5. Each sensor as described in G.v.3 of this condition is observed daily or is equipped with an alarm unless the agitator is located within the boundary of an unmanned plant site.
 6. The Permittee determines based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both.
 7. If indications of liquids dripping from the agitator seal exceed the criteria established in paragraph G.v.6 of this condition, or if, based on the criteria established in paragraph G.v.6 of this condition, the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected.

- H. Pursuant to Regulation 40 CFR 63.174(a) and (b), for equipment in organic HAP service,

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (Continued)**

as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:

- i. The Permittee shall monitor all connectors in gas/vapor and light liquid service, except as provided in 40 CFR 63.174(f) through (h), at the intervals specified in H.ii of this condition.
 1. The connectors shall be monitored to detect leaks by the method specified in 40 CFR 63.180(b) of this subpart.
 2. If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.
- ii. The Permittee shall monitor for leaks as specified below, except as provided in 40 CFR 63.174(c)(2):
 1. Once per year (i.e., 12-month period), if the percent leaking connectors, as determined according to 40 CFR 63.174(i) and (j), in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring period.
 2. Once every 2 years, if the percent leaking connectors, as determined according to 40 CFR 63.174(i) and (j), was less than 0.5 percent during the last required monitoring period. The Permittee may comply with this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The percent leaking connectors will be calculated for the total of all monitoring performed during the 2-year period.
 3. If the Permittee of a process unit in a biennial leak detection and repair program calculates less than 0.5 percent leaking connectors, as determined according to 40 CFR 63.174(i) and (j), from the 2-year monitoring period, the Permittee may monitor the connectors one time every 4 years. The Permittee may comply with the requirements of this paragraph by monitoring at least 20 percent of the connectors each year until all connectors have been monitored within 4 years.
 4. If a process unit complying with the requirements of H. ii of this condition using a 4-year monitoring interval program has greater than or equal to 0.5 percent but less than 1 percent leaking connectors, as determined according to 40 CFR 63.174(i) and (j), the Permittee shall increase the monitoring frequency to one time every 2 years. The Permittee may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors in the first year and the remainder of the connectors in the second year. The Permittee may again elect to use the provisions of paragraph H.ii.3 of this condition when the percent leaking connectors, as determined according to 40 CFR 63.174(i) and (j), decreases to less than 0.5 percent.
 5. If a process unit complying with requirements of paragraph H.ii.3 of this condition using a 4-year monitoring interval program has 1 percent or greater leaking connectors, as determined according to 40 CFR 63.174(i) and (j), the Permittee shall increase the monitoring frequency to one time per year. The Permittee may again elect to use the provisions of paragraph H.ii.3 of this condition when the percent leaking connectors, as determined according to 40 CFR 63.174(i) and (j), decreases to less than 0.5 percent.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

- I. Pursuant to Regulation 40 CFR 63.174(c), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following applies:
 - i. Except as provided in paragraph I.ii of this condition, each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks when it is reconnected or within the first 3 months after being returned to organic hazardous air pollutants service. If the monitoring detects a leak, it shall be repaired according to the provisions of 40 CFR 63.174(d), unless it is determined to be nonrepairable, in which case it is counted as a nonrepairable connector for the purposes of 40 CFR 63.174(i)(2).
 - ii. As an alternative to the requirements in paragraph I.1 of this condition, the Permittee may choose not to monitor connectors that have been opened or otherwise had the seal broken. In this case, the Permittee may not count nonrepairable connectors for the purposes of 40 CFR 63.174(i)(2). The Permittee shall calculate the percent leaking connectors for the monitoring periods described in 40 CFR 63.174(b), by setting the nonrepairable component, C (AN), in the equation in 40 CFR 63.174(i)(2) to zero for all monitoring periods.
 - iii. The Permittee may switch alternatives described in paragraphs I.i and I.ii of this condition at the end of the current monitoring period he is in, provided that he reports as required in 40 CFR 63.182 prior to beginning the new alternative in annual monitoring. The initial monitoring in the new alternative shall be completed no later than 12 months after reporting the switch.
 - iv. As an alternative to the requirements of H ii of this section, each screwed connector 2 inches or less in nominal inside diameter installed in a process unit before the dates specified in paragraph I.iv.3 or I.iv.4 of this condition may:
 1. Comply with the requirements of 40 CFR 63.169, and
 2. Be monitored for leaks within the first 3 months after being returned to organic hazardous air pollutants service after having been opened or otherwise had the seal broken. If that monitoring detects a leak, it shall be repaired according to the provisions of 40 CFR 63.174(d).
 3. For sources subject to 40 CFR 63 Subparts F and I, the provisions of paragraph I iv of this condition apply to screwed connectors installed before December 31, 1992.

5. Specific Recordkeeping Requirements:

- A. Pursuant to Regulation 40 CFR 63.181(b), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the following information pertaining to all equipment in each process unit subject to the requirements in 40 CFR 63.162 through 63.174 shall be recorded and the records kept for 5 years:
 - i. A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in 40 CFR 63.174 and instrumentation systems) in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option. Connectors need not be individually identified if all connectors in a designated area

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (Continued)**

or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated.

- ii. A schedule by process unit for monitoring connectors subject to the provisions of 40 CFR 63.174(a) and valves subject to the provisions of 40 CFR 63.168(d).
- iii. A list of identification numbers for equipment that the Permittee elects to equip with a closed-vent system and control device, under the provisions of 40 CFR 63.163(g), 63.164(h), 63.165(c), or 63.173(f).
- iv. A list of identification numbers for compressors that the Permittee elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.164(i).
- v. A list of identification numbers for pressure relief devices subject to the provisions in 40 CFR 63.165(a).
- vi. A list of identification numbers for pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.165(d).
- vii. Identification of instrumentation systems in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option. Individual components in an instrumentation system need not be identified.
- viii. Identification of screwed connectors subject to the requirements of 40 CFR 63.174(c)(2). Identification can be by area or grouping as long as the total number within each group or area is recorded.
- ix. The following information shall be recorded for each dual mechanical seal system:
 - 1. Design criteria required in 40 CFR 63.163(e)(6)(i), 63.164(e)(2), and 63.173(d)(6)(i) and an explanation of the design criteria; and
 - 2. Any changes to these criteria and the reasons for the changes.The following information pertaining to all pumps subject to the provisions of 40 CFR 63.163(j), valves subject to the provisions of 40 CFR 63.168(h) and (i), agitators subject to the provisions of 40 CFR 63.173(h) through (j), and connectors subject to the provisions of 40 CFR 63.174(f) through (h) shall be recorded:
 - 1. Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment.
 - 2. A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment.
 - 3. A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair.
- x. A list of valves removed from and added to the process unit, as described in 40 CFR 63.168(e)(1), if the net credits for removed valves is expected to be used.
- xi. A list of connectors removed from and added to the process unit, as described in 40 CFR 63.174(i)(1), and documentation of the integrity of the weld for any removed connectors, as required in 40 CFR 63.174(j). This is not required unless the net credit for removed connectors is expected to be used.

- B. Pursuant to Regulation 40 CFR 63.181(c), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

Subpart H compliance option, for visual inspections of equipment, the Permittee shall document that the inspection was conducted and the date of the inspection. The Permittee shall maintain records as specified in 40 CFR 63.181(d) for leaking equipment identified in this inspection, except as provided in 40 CFR 63.181(e). These records shall be retained for 5 years.

- C. Pursuant to Regulation 40 CFR 63.181(d), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, when each leak is detected as specified in 40 CFR 63.163, 63.164, 63.168, 63.169, 63.173, and 63.174, the following information shall be recorded and kept for 5 years:
- i. The instrument and the equipment identification number and the operator name, initials, or identification number.
 - ii. The date the leak was detected and the date of first attempt to repair the leak.
 - iii. The date of successful repair of the leak.
 - iv. Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonreparable.
 - v. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 1. The Permittee may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by 40 CFR 63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.
 2. If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.
 - vi. Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - vii. Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in 40 CFR 63.174(b), as described in 40 CFR 63.174(c)(1), unless the Permittee elects to comply with the provisions of 40 CFR 63.174(c)(1)(ii).
 - viii. The date and results of monitoring as required in 40 CFR 63.174(c). If identification of connectors that have been opened or otherwise had the seal broken is made by location under C.viii of this condition, then all connectors within the designated location shall be monitored.
 - ix. Copies of the periodic reports as specified in 40 CFR 63.182(d), if records are not maintained on a computerized database capable of generating summary reports from the records.
- D. Pursuant to Regulation 40 CFR 63.181(f), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the dates and results of each compliance test required for compressors subject to the provisions in 40 CFR 63.164(i) and the dates and results of

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

the monitoring following a pressure release for each pressure relief device subject to the provisions in 40 CFR 63.165(a) and (b). The results shall include:

- i. The background level measured during each compliance test.
- ii. The maximum instrument reading measured at each piece of equipment during each compliance test.

- E. Pursuant to Regulation 40 CFR 63.181(h), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, each Permittee of a process unit subject to the requirements of 40 CFR 63.175 and 63.176 shall maintain the records specified below for the period of the quality improvement program for the process unit.
 - i. For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in 40 CFR 63.175(d):
 1. All data required in 40 CFR 63.175(d)(2).
 2. The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter.
 3. The beginning and ending dates while meeting the requirements of 40 CFR 63.175(d).
 - ii. For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in 40 CFR 63.175(e):
 1. All data required in 40 CFR 63.175(e)(2).
 2. The percent leaking valves observed each quarter.
 3. Documentation of all inspections conducted under the requirements of 40 CFR 63.175(e)(4), and any recommendations for design or specification changes to reduce leak frequency.
 4. The beginning and ending dates while meeting the requirements of 40 CFR 63.175(e).
 - iii. For owners or operators subject to the requirements of the pump quality improvement program as specified in 40 CFR 63.176:
 1. All data required in 40 CFR 63.176(d)(2).
 2. The rolling average percent leaking pumps.
 3. Documentation of all inspections conducted under the requirements of 40 CFR 63.176(d)(4), and any recommendations for design or specification changes to reduce leak frequency.
 4. The beginning and ending dates while meeting the requirements of 40 CFR 63.176(d).
 - iv. If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair.
 - v. Records of all analyses required in 40 CFR 63.175(e) and 63.176(d). The records will include the following:
 1. A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices.
 2. The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

- 3. The list of candidate superior emission performing valve or pump technologies, and documentation of the performance trial program items required under 40 CFR 63.175(e)(6)(iii) and 63.176(d)(6)(iii).
 - 4. The beginning date and duration of performance trials of each candidate superior emission performing technology.
 - vi. All records documenting the quality assurance program for valves or pumps as specified in 40 CFR 63.175(e)(7) and 63.176(d)(7).
 - vii. Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in 40 CFR 63.175(e)(7) and 63.176(d)(7).
 - viii. Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in 40 CFR 63.176(d)(8).
 - ix. Information and data to show the corporation has fewer than 100 employees, including employees providing professional and technical contracted services.
- F. Pursuant to Regulation 40 CFR 63.181(i), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, the Permittee of equipment in heavy liquid service shall comply with the requirements of either paragraph F i or F ii of this condition, as provided in paragraph F iii of this condition.
- i. Retain information, data, and analyses used to determine that a piece of equipment is in heavy liquid service.
 - ii. When requested by the Administrator, demonstrate that the piece of equipment or process is in heavy liquid service.
 - iii. A determination or demonstration that a piece of equipment or process is in heavy liquid service shall include an analysis or demonstration that the process fluids do not meet the definition of "in light liquid service." Examples of information that could document this include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.
- G. Pursuant to Regulation 40 CFR 63.181(j), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year.

6. Specific Reporting Requirements:

- A. Pursuant to Regulation 40 CFR 63.182(a)(3), for equipment in organic HAP service, as defined in 40 CFR 63.161, associated with a process unit that is subject to the 40 CFR 63 Subpart H compliance option, each Permittee shall submit Periodic Reports in accordance with 40 CFR 63.182(d) as follows:
- i. A report containing the information in paragraphs A ii, A iii and A iv of this condition shall be submitted semiannually starting 6 months after the Notification of Compliance Status, as required in 40 CFR 63.182(c). The first periodic report shall cover the first 6 months after the compliance date specified in 40 CFR 63.100(k)(3).

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (Continued)**

Each subsequent periodic report shall cover the 6-month period following the preceding period.

- ii. For each process unit complying with the provisions of 40 CFR 63.163 through 63.174, the summary information listed below for each monitoring period during the 6-month period.
 - 1. The number of valves for which leaks were detected as described in 40 CFR 63.168(b), the percent leaking, and the total number of valves monitored;
 - 2. The number of valves for which leaks were not repaired as required in 40 CFR 63.168(f), identifying the number of those that are determined nonrepairable;
 - 3. The number of pumps for which leaks were detected as described in 40 CFR 63.163(b), the percent leaking, and the total number of pumps monitored;
 - 4. The number of pumps for which leaks were not repaired as required in 40 CFR 63.163(c);
 - 5. The number of compressors for which leaks were detected as described in 40 CFR 63.164(f);
 - 6. The number of compressors for which leaks were not repaired as required in 40 CFR 63.164(g);
 - 7. The number of agitators for which leaks were detected as described in 40 CFR 63.173(a) and (b);
 - 8. The number of agitators for which leaks were not repaired as required in 40 CFR 63.173(c);
 - 9. The number of connectors for which leaks were detected as described in 40 CFR 63.174(a), the percent of connectors leaking, and the total number of connectors monitored;
 - 10. The number of connectors for which leaks were not repaired as required in 40 CFR 63.174(d), identifying the number of those that are determined nonrepairable;
 - 11. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible.
 - 12. The results of all monitoring to show compliance with 40 CFR 63.164(i), 63.165(a), and 63.172(f) conducted within the semiannual reporting period.
 - 13. If applicable, the initiation of a monthly monitoring program under 40 CFR 63.168(d)(1)(i), or a quality improvement program under either 40 CFR 63.175 or 63.176.
 - 14. If applicable, notification of a change in connector monitoring alternatives as described in 40 CFR 63.174(c)(1).
 - 15. If applicable, the compliance option that has been selected under 40 CFR 63.172(n).
- iii. The information listed in 40 CFR 63.182(c) for the Notification of Compliance Status for process units with later compliance dates. Any revisions to items reported in earlier Notification of Compliance Status, if the method of compliance has changed since the last report.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

EMISSION UNIT NUMBER	EMISSION UNIT NAME
2-122-B-1	KDS Charge Heater Maximum Rated Capacity: 53.3 mmBTU/hr

DESCRIPTION

The KDS Charge Heater (No. 2-122-B-1) is a process heater in the proposed new KDS Unit. This indirect-fired heater will be used to raise the temperature of the feed material entering the KDS reactor. This heater will be fired with natural gas or refinery fuel gas and will have a maximum heat input capacity of 53.3 MMBtu/hr (HHV basis).

APPLICABLE REGULATIONS FOR KDS CHARGE HEATER

401 KAR 59:015 – New Indirect Heat Exchangers

401 KAR 60:005 – (40 CFR 60 Subpart J) Standards of Performance for Petroleum Refineries

1. Operating Limitations:

- A. Pursuant to 401 KAR 60.005 and 40 CFR 60.104(a)(1), the KDS charge heater shall not burn any fuel gas that contains hydrogen sulfide (H₂S) in excess of 230 mg/dscm (0.10 gr/dscf).
- B. Pursuant to 401 KAR 50:055, should fuel gas CEMS or other evidence indicate a potential to exceed the H₂S in fuel gas standard, then the permittee shall implement the following measures:
 - i. The operator shall review the fuel gas system control board for indications as to why the H₂S concentration has increased, including a review of the fuel gas drum operation and the fuel gas flow. Any reasonable changes which can be made at the fuel gas system control board to lower the concentration of the H₂S in the fuel gas shall be made;
 - ii. The permittee's field operation staff shall be contacted immediately by the operator and shall promptly, physically view the fuel gas drum system and check for proper operation;
 - iii. If the H₂S concentration in any fuel gas drum exceeds the rolling three (3) hour average standard as indicated by the H₂S CEMS, then the permittee shall utilize the measurements from the H₂S CEMS to determine the compliance status of the fuel gas. If the permittee elects to utilize the measurements from the H₂S CEMS in lieu of conducting Method 11 tests, the permittee shall so advise the Division and the H₂S CEMS shall be the method of compliance;
 - iv. Refinery environmental personnel shall be notified and they shall notify the Division and report the exceedance, as documented by the CEMS and identify the cause and the expected duration as specified in condition 6 of the Monitoring, Recordkeeping, and Reporting Section (Section F) of this permit.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

No oral or written report to the Division shall be required if the standard is not exceeded. However, records identifying the investigative effort shall be kept and made available to Division personnel upon request;

- v. The permittee may, at its option, elect to perform a Reference Method 11 compliance test on any fuel gas drum to determine its compliance status. A Reference Method 11 analysis shall be performed on samples, which shall be taken every hour, for the duration of the time period, that the CEMS imply an exceedance of the standard;
- vi. To the extent practicable, consumption from the fuel gas drum exhibiting the increase/exceedance shall be reduced by using other fuel gas drum supplies to meet system demands or by using other fuels such as propane, butane and/or methane which will reduce the H₂S concentrations. If the foregoing fuel adjustments do not remedy the increase/exceedance, maintenance shall be notified and shall take steps necessary to reduce the H₂S concentration in the fuel gas to below the standard as expeditiously as practicable;
- vii. Operations and maintenance staff shall record their observations and investigative/resolution activities and shall make them available to Division personnel upon request.

2. Emission Limitations:

- A. Pursuant to 401 KAR 59:015(4)(1)(c), the charge heater shall not emit particulate matter in excess of 0.3776 lb/mmBTU.

Compliance Demonstration Method: While burning only refinery fuel gas and/or natural gas, the permittee shall be deemed to be in compliance with the applicable particulate matter (PM) emission standard.

- B. Pursuant to 59:015(4)(2), no heater subject to this rule shall emit visible particulate matter in excess of the following amount:

[401 KAR 59:015(4)(2)]

“...Except as provided in Section 3(3) of this regulation no owner or operator of an affected facility subject to the provisions of this regulation shall cause to be discharged into the atmosphere from that affected facility, particulate matter in excess of that specified below:

(2) Emissions which exhibit greater than twenty (20) percent opacity except:

(a) That, for indirect heat exchangers with heat input capacity of 250 million BTU per hour or more, a maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.

(b) That, for indirect heat exchangers with heat input capacity of less than 250 million BTU per hour, a maximum of forty (40) percent opacity shall be permissible for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)

(c) For emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.

Compliance Demonstration Method: While burning only refinery fuel gas and/or natural gas, the permittee shall be deemed to be in compliance with the applicable opacity standard.

- C. Pursuant to 401 KAR 59:015(5)(1)(c)(1), the charge heater shall not emit sulfur dioxide in excess of 1.51 lb/mmBTU.
- D. The source has elected to accept permit conditions to preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration, and 401 KAR 51:052, Review of New Sources, to the proposed modification. The “synthetic minor” emission limitations for the KDS Charge Heater are as follows:

Affected Units	maximum emissions (tons/yr)				
	SO ₂	NO _x	VOC	CO	PM ₁₀
KDS Charge Heater	6.3	11.7	1.3	19.6	1.8

Each of these limits is based on a 365-day rolling total.

Compliance Demonstration Method: The permittee shall calculate for each day, in tons per year, the rolling 365-day emissions of each pollutant. Emissions of SO₂ shall be based upon data obtained from H₂S CEMS. Emissions of NO_x shall be based upon emission factors from the most recent performance test. Emissions of CO, VOC and PM₁₀ shall be based upon AP-42 emission factors of 0.084 lb/MMBtu heat input (HHV), 0.0055 lb/MMBtu heat input (HHV), and 0.0076 lb/MMBtu heat input (HHV), respectively. Compliance with the synthetic minor emission limitations shall be achieved no later than 180 days after the date of startup.

3. Testing Requirements:

- A. Performance testing shall be conducted to demonstrate compliance with the KDS Charge Heater synthetic minor NO_x emission limitation listed above.
- B. Performance testing of the KDS Charge Heater shall be completed within 180 days after startup. The performance testing shall be conducted using the methods incorporated by reference in 401 KAR 50:015, or other methods approved by the Division.
- C. The permittee shall submit to the Division a performance test protocol not less than 30 days prior to conducting performance testing of the KDS Charge Heater. The performance test protocol shall specify, at a minimum, the NO_x test methods.

SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (Continued)**4. Specific Monitoring Requirements:**

- A. In order to demonstrate compliance with the sulfur dioxide limits of 401 KAR 59:015, the permittee shall monitor the indirect heat exchangers as follows:
 - i. A fuel gas sample shall be collected from each fuel gas drum necessary to characterize the heating value of the fuel combusted in each indirect heat exchanger once every eight (8) hour shift. Each sample shall be analyzed separately to determine the lower heating value of the fuel gas. The permittee shall record times when the sample could not be collected and keep such records on site for Division's inspection. The remaining sample(s) for that day shall be utilized to determine compliance with the daily standard for heating value in fuel gas.
 - ii. Fuel gas flow shall be determined daily for each indirect heat exchanger by correcting the indirect heater fuel gas flow meter data for fuel gas molecular weight and pressure.
- B. Pursuant to the emission monitoring requirements contained in 401 KAR 59:005, Section 4 (see Appendix F); 401 KAR 59:015, Section 7 (see Appendix G); and 40 CFR 60.105(a)(4), the permittee shall monitor hydrogen sulfide (H₂S) concentration in the fuel gas via continuous monitoring systems located at each fuel gas drum necessary to characterize the sulfur content of the fuel gas being burned. The continuous monitoring systems shall use reference Method 11 or an alternate method approved by the Division. The averaging time for H₂S in fuel gas shall be a three (3) hour rolling average.
- C. The permittee shall comply with all provisions of 40 CFR 60 Appendix F, Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determination, for each fuel gas drum H₂S continuous monitoring system.

5. Specific Recordkeeping Requirements:

- A. The permittee shall maintain daily records of daily heat input rate and 365-day rolling sum heat input rate to the KDS Charge Heater.
- B. The permittee shall calculate and maintain daily records of 365-day rolling sum emissions of each pollutant from the KDS Charge Heater. Emissions of SO₂ shall be based upon data obtained from H₂S CEMS. Emissions of NO_x shall be based upon an emission factor, expressed in terms of pounds per million Btu heat input, developed from the most recent performance test. Emissions of CO, VOC, and PM₁₀ shall be based on AP- 42 emission factors of 0.084 lb/MMBtu heat input (HHV), 0.0055 lb/MMBtu heat input (HHV), and 0.0076 lb/MMBtu heat input (HHV), respectively.

6. Specific Reporting Requirements:

- A. All data required by conditions 2 and 4 above shall be submitted to the Division within 30 days of the end of each semi-annual period in written form, and in

**SECTION B - AFFECTED FACILITIES, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS (Continued)**

- electronic format in accordance with the procedures approved by the Division.
- B. The permittee shall comply with the emission reporting requirements contained in Regulations 40 CFR 60.105(e)(3)(ii) and 40 CFR 60.106(e)).
 - C. The permittee shall submit semiannually a report of the 365-day rolling sum emissions of SO₂, NO_x, CO, VOC, and PM₁₀ from the KDS Charge Heater.

SECTION C - INSIGNIFICANT ACTIVITIES

None

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Pollutant emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (Continued)

7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.6 [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality
Ashland Regional Office
3700 13th Street
Ashland, KY 41104-1507

U.S. EPA Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (Continued)

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Pursuant to Section VII (3) of the policy manual of the Division for Air Quality as referenced in 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

SECTION G - GENERAL PROVISIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 and of the Clean Air Act and is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a, 3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a, 6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements; or
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the conditions of this permit [Section 1a, 7,8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a

- result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a, 14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a, 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
 8. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a, 15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
 9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a, 10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
 10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
 11. This permit does not convey property rights or exclusive privileges [Section 1a, 9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
 12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Environmental and Public Protection or any other federal, state, or local agency.
 13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
 14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].
 15. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
 16. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in the permit and
 - b. Non-applicable requirements expressly identified in this permit.

(b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
2. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

(c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein in accordance with the terms and conditions of this permit.

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was

achieved.

3. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7 of this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test
6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.
7. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.
8. Pursuant to Section VII 1.(2 and 3) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), if a demonstration of compliance, through performance testing was made at a production rate less than the maximum specified in the application form, then the permittee is only authorized to operate at a rate that is not greater than 110% of the rate demonstrated during performance testing. If and when the facility is capable of operation at the rate specified in the application, compliance must be demonstrated at the new production rate if required by the Division.

(e) Emergency Provisions

1. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission

limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:

- a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - e. This requirement does not relieve the source of other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
 3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

(f) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 3346
Merrifield, VA, 22116-3346

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as

- defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
- e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I – COMPLIANCE SCHEDULE

None